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## How Teachers Can Best Use E-Books to Help ELL Students: A Web-Design Project

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How Teachers Can Best Use E-Books To Help ELL Students: A Web-Design Project

by Paul R. Davis

A capstone submitted in partial fulfillment of the requirements for the degree of Master  
of Arts in English as a Second Language

Hamline University

St. Paul, Minnesota

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## TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION TO CAPSTONE.....	6
Rationale for E-Book Project.....	6
Personal Experience with Independent Reading.....	6
The Rise of E-Books.....	9
E-Books and ELLs: The Solution for Independent Reading?.....	11
Statistical Rationale for Project.....	15
Conclusion.....	16
CHAPTER TWO: LITERATURE REVIEW.....	17
Overview.....	18
How E-Books Provide Comprehensible Input.....	18
What Factors Facilitate Comprehensible Input?.....	19
Compelling stories.....	19
Narrow reading.....	20
Culturally relevant text.....	21
Year-round access to books.....	21
How Well Do E-Books Provide Comprehensible Input.....	22
How E-Books Can Help Emergent Readers.....	25
Concept About Print.....	26
Story Structure.....	27

	3
Phonological Awareness.....	27
Sight-Word Fluency.....	28
Vocabulary and Oral Language.....	30
Prosody.....	31
E-Book Text Tools: Help or Hindrance?.....	32
Games.....	33
Vocabulary Glossaries.....	34
Music.....	34
Pictures.....	35
Student Gender.....	35
The Role of Adults.....	36
Setting Guidelines.....	37
Creating the Culture for Reading.....	37
Promoting the Love of Reading.....	38
Connecting Instruction and Independent Practice.....	38
Conclusion.....	39
<b>CHAPTER THREE: PROJECT DESCRIPTION.....</b>	<b>42</b>
Project Overview.....	42
Project Framework.....	43
High-quality Content.....	43
High-quality Design.....	44
High-quality Organization.....	45

	4
User-friendliness.....	45
Choice of Project.....	46
Audience.....	49
Project Timeline and Description.....	51
Writing the Articles.....	51
Selecting Wordpress as a Platform.....	53
Organizing Articles into Categories.....	53
Creating a Site Identity.....	54
Creating and Index and Homepage.....	55
Editing and Final Touches.....	56
Advertising.....	56
Conclusion.....	57
CHAPTER FOUR: CONCLUSIONS.....	58
Main Learnings.....	58
The Value of Research.....	59
Every Section Must Stand Alone.....	59
Frontload Before, Monitor During, Share After.....	61
Literature Review Revisited.....	61
Sources about E-Books and Emergent Readers.....	62
Sources about Comprehensible Input.....	62
Sources on Managing Independent Reading in the Classroom....	62
Project Value and Next Steps.....	63

	5
Policy Implications.....	63
Impact on My Teaching.....	65
How this Project Benefits the Profession.....	66
Limitations and Ongoing Work.....	67
Conclusion.....	68
REFERENCES.....	70

## CHAPTER ONE: INTRODUCTION TO CAPSTONE

The central question of this capstone is, *How can elementary teachers best use independent reading with E-Books to benefit ELL (English language learner) students?*

E-Books are electronic books designed to be consumed on a computer, smart device, or designated E-Reading device.

I intend to create a website focused on using E-Books with ELLs for elementary mainstream teachers and ELL teachers. This will include a summary of research on E-Books and independent reading with ELLs, reviews of websites where students can access E-Books, guidelines and recommended procedures for implementing E-reading in the classroom, activities for teachers to use in their classrooms, and other resources for teachers to develop their own plan of action for using E-Reading with ELL students.

In this chapter, I will present my rationale for choosing this project. I will first discuss my experiences with using independent reading with ELLs and how independent reading has disappointed me in the past. I will next discuss the prevalence of E-reading in society and the rise of E-reading in education. Next, I will describe how in the last year I have come to believe that E-reading may be of particular benefit to ELLs. Last, I will present a few simple statistics that I believe speak to why this project is important.

### **Rationale for E-Book Project**

#### **Personal Experience with Independent Reading.**

**How I became interested in independent reading.** In undergraduate school, I majored in English and earned my license to teach Communication Arts and Literature for grades 5-12. While E-Reading programs for students were not something I knew much about at that time, the role of independent reading was a major topic in several of my courses. In an English methods course during my junior year, we read *The Reading Zone* by a middle school teacher named Nancy Atwell (2007). Atwell is one of the most passionate advocates of independent reading during the school day. What has stuck with me since reading it years ago is the idea that students learn the most when they are immersed in a book and having a great experience, and this only happens when students are granted choice in what they read.

**Ideology challenged by experience.** However, my first experience with students reading independently was not the kind of student-centered utopia Atwell told me it would be. I student-taught in a suburban high school in which the tenth grade English classes did Silent Sustained Reading (SSR) for forty-five minutes every Friday. A few students read voraciously, but most needed the incentive of points in the gradebook just to come to class with a book. Their books seemed to be chosen at random; some admitted to borrowing one from a friend or grabbing one from the library just before class on SSR days. My cooperating teacher told me that I should bring a book and show that adults enjoy reading (which is something I knew I should do from Atwell as well). But between telling some students to move further apart so they would not talk and gently waking up others, I never seemed to get much reading done, and I wondered how much the students accomplished.



The next fall, I was hired to teach ELL on a variance license in a rural district, working mostly with grades 4-8. In the fall, I will be beginning my fifth year in this role. For large parts of the day, I use pull-out groups to service most of my students. They benefit from small group sizes (usually fewer than six students), but because of scheduling limitations I often have a wide range of language proficiency levels and several different primary languages in the room at a given time.

Back in my first year, I loved working with English learners but was naive about how to help them acquire language and improve reading. Being new to the elementary environment, there were two aspects of how reading is taught at my school that I did not question at first: 1) The reading curriculum is full of shared reading texts and workbook pages that leave little time for independent reading 2) Independent reading is managed through the Accelerated Reader program.

Accelerated Reader is a program where students are awarded points for passing quizzes on books at their reading level. Students do get to choose what they read, but they are always thinking about how many points they need. Most teachers at my school require a certain number of AR points as part of the homework grade for their reading classes. This means that towards the end of the semester, we see students frantically reading and taking quizzes. For many students, the process is tedious and leaves little room for reading to be joyful and free. They are also hesitant to take a risk on a harder or longer book for fear of not passing the quiz. If they read a book and but cannot earn points from it, they view that as time wasted. As a result, I began early in my first year

teaching to veer away from providing independent reading time during my time with students.

**Stephen Krashen and how independent reading might benefit ELLs.** In the fall of 2015, I heard Stephen Krashen deliver a keynote address at the MinneTESOL conference in Bloomington, Minnesota. Like Atwell, he suggested that passionate, independent reading is one of the most important components of education. However, whereas Atwell was focused on all students and how they develop fluency and comprehension, Krashen was talking particularly about how ELL students attend to input in reading and thus learn new language structures and vocabulary. His message was that students would attend to more and learn more language if they were reading content they enjoy. This was the first time that I really put a lot of thought into the role that independent reading plays with ELLs specifically.

**Summary of personal context.** The purpose of this section was to describe my experiences and philosophy regarding independent reading with all students and ELLs in particular. Overall, I am still determined to make independent reading work in my classroom, but I do not know what steps I need to take to make this happen, and I have been unable to inspire passionate reading in many of my students. I am investigating the use of E-Books as a possible solution.

### **The Rise of E-Books**

In the previous section, I described how I maintain a belief that immersive reading can be of great benefit to ELLs although successfully implementing independent reading

is complicated. In this section, I will discuss how E-Books are having an influence on society and education.

**E-Books in society.** As technology changes how adults do daily activities, educators have to think about what experiences they need to provide to students and how they can use new tools at their disposal. One piece of technology that has changed how many adults consume media is E-Books. According to the Pew Research Center (2014), more than 50% of American adults own a tablet or designated E-Reader device with the number continuing to rise. While E-Books have recently declined relative to print books among adults, in 2015, 32% of adults still reported that they primarily accessed books digitally (“The plot twist: E-Book sales slip, and print is far from dead”, 2015). While some may embrace the new technology and others lament the loss of good old-fashioned books, E-Books do not seem to be going away.

**E-Books in education.** E-Reading is also making a mark on education. As many schools develop 1:1 device to student programs, E-Books are easier to access than ever before. E-Book websites like Epic!, RAZ-Kids, and Tumblebooks specifically target young readers. Teachers can also create classes on E-Reading websites like Readworks.org and assign students to read and take comprehension quizzes on fiction and nonfiction passages.

Meanwhile, most high-stakes tests today require students to read and answer questions on digital screens. Pencil and paper tests have become unusual.

Electronic textbooks are another growing trend. At the school where I work, students only access their math texts digitally. In 2016, nearly one third of the total cost

that US college students spent on college course materials was spent on purchases and rentals of digital books (“Textbook Trends: How U.S. College Students Source Course Materials”, 2016).

### **E-Books and ELLs: The Solution for Independent Reading?**

I have established that successfully implementing independent reading in the classroom is harder than it sounds and that E-Reading is becoming increasingly prevalent. In this section, I will describe my personal experience in using E-Books in the past year and speculate on how these changes might affect ELLs.

**Personal experience with E-Books.** This year our ELL department used part of our budget to purchase a subscription to Reading A-Z at the suggestion of one of my colleagues. This includes a program called RAZ-Kids in which students can access E-Books at a level assigned to them and take quizzes. They can either choose to listen to the texts read to them by a computer voice, or they can choose to read the texts themselves without audio.

So far, I am mostly impressed with the program. While the fiction books included vary in quality, the nonfiction texts cover a wide range of topics and seem to engage students. Some students will pause and take off their headphones to tell me something they learned. A student early in the year asked me if I knew that sharks layed eggs.

I should admit my bias--I am hoping that RAZ-Kids is truly effective because I need ways to engage my students and personalize their reading to their levels and interests. Furthermore, my school now assigns a Chromebook to every student, and I would like to think that I am leveraging technology to meet the needs of all my students.

From the teacher point of view, RAZ-Kids is fabulous because you are in complete control. While students are free to select texts, the teacher chooses the level of books the student can access. The teacher can see how students score on their quizzes and get alerts when students miss five questions in a row on a particular skill such as distinguishing facts from opinions. Students are rewarded for passing quizzes by earning stars and the teachers can award more stars when students answer open-ended prompts well. Students can use the stars to buy digital accessories for their rocket which they can access when they log in.

While it seems powerful to the teacher, I wonder what this program is like from the student point of view. One thing that I learned from Nancy Atwell and Stephen Krashen is that students will learn more when they have more freedom. Does RAZ-Kids ultimately constrain readers the same way that Accelerated Reader does? With the lack of quality fiction, will students ever progress from reading to please their teacher and earn rewards to reading for their own pleasure and learning? If RAZ-Kids does have significant limitations, do other websites provide a better E-Reading experience? To answer these questions I will need to research independent reading with ELLs and how E-Book reading impacts literacy and then scrutinize RAZ-Kids and other websites with a more informed eye. Answering these questions is one part of what I intend to do through the capstone process.

**Why E-Books may benefit ELLs.** In theory, it is easy to imagine a wide array of benefits for using E-reading specifically with English learners. I have been considering the potential of E-Books with ELLs in the last year.

The use of online resources might give ELLs more options than their schools' libraries can provide for certain types of books. For example, they might be able to access more culturally relevant books or books at lower English reading levels than most students at their grade level need. E-Books online can also offer students books or passages in their native languages. For teachers who do not have the knowledge or the time to teach reading in other languages, in particular with low-incidence languages like Tagalog or Gujarati, this may be a practical way to let students continue developing first-language literacy.

Furthermore, because E-Books of all different kinds can be read on any smart device, students have privacy regarding what they choose to read. With traditional books, the covers and thickness allow for a lot of social referencing. This can influence how students select texts for themselves in negative ways. Students may see others with more complex books and try to read something beyond their own level.

Some E-Books and E-Reading websites also have unique features that seem specially targeted towards ELLs and struggling readers. Many E-Books provide the option of listening to the book read aloud which of course allows students to access more challenging books and potentially develop oral language faster. Some E-Reading websites provide convenient ways to develop personalized vocabulary glossaries or to look up the definition or pronunciation of a word simply by clicking it.

In addition, reading E-Books is also one of the few activities in which low proficiency students seem to be able to engage on their own. For teachers with a wide range of proficiency levels in their classes, we should admit that one of the most

attractive features of E-Books is that they provide a way of keeping some students working on meaningful literacy skills while delivering instruction in any area to another group.

Finally, many websites for E-reading give the teachers an easy way to monitor what students are reading, how much they are reading, how well they are comprehending their reading (as measured by digital comprehension quizzes), and even what specific types of comprehension questions students are missing.

In short, E-reading seems like an attractive option because it makes it possible to individualize many aspects of a students' reading experience including the reading level of the text, the content of the text, and the language of the text.

**Theoretical limitations of E-Reading with ELLs.** Despite all those benefits, we should not assume that E-reading is a silver bullet. Teachers still need to consider whether E-reading is effective in promoting specific reading skills, what websites students should use to access E-Books and passages, guidelines for implementing independent E-reading in their classroom, and ways to supplement E-reading to maximize benefits.

Furthermore, to most ELL teachers, it is obvious that E-reading would only be one small component of an ELL program. However, what activities can be used to supplement E-reading in order to round out students' language abilities? Influential theorists of language acquisition like Swain and Lapkin (1995) would undoubtedly argue that while E-reading may be useful to an extent, ELLs can not learn new language forms without figuring out how to put things in words. In particular, they think that negotiation

of meaning, the process of confusion and clarification in authentic conversation, is essential to language development. E-reading is most obviously an individual task where students receive input but produce very little language. However, could there be ways around this problem? Are there ways to make E-reading collaborative or to add conversation as part of the process?

I am enthusiastic about the potential of E-Books for ELL students. However, I also realize E-Books have limitations. I am curious about what these limitations are and how teachers and students might work around them.

### **Statistical Rationale**

I have discussed my personal experiences, beliefs, and ideas about how E-Reading might benefit ELLs. In this section, I will present some facts that I think demonstrate why using E-Books with ELL students is a topic that needs to be investigated. These statistics show that there is a need to improve reading performance among ELL students in Minnesota.

- The Minnesota Department of Education's *English Learners in Minnesota Report* (2017) indicates that since 2012 the number of English learners in Minnesota public schools has been growing at a faster percentage than general enrollment. As of 2016, there were 71,719 ELLs enrolled in Minnesota schools. This constitutes about 8.4% of all the students in the state. The bulk of English learners are in grades K-5.
- On the Minnesota Comprehensive Assessments (MCAs) for 2016, 64.7% of English learners did not meet the state target for reading. Among all Minnesota



students, 20.1% did not make the state target with English learners accounting for about a quarter of those (*English Learners in Minnesota Report*, 2017).

### **Conclusion**

My research question is, *How can teachers best use independent reading with E-Books with elementary ELL students?* My goal is to design a website for elementary teachers with advice and resources for implementing E-reading in the classroom. In this chapter, I have discussed my past experiences with and reflections on independent reading in class, the prevalence of E-reading in education and in society at large, the apparent advantages and limitations that E-Books provide to ELLs, and the need to improve reading instruction for ELLs in Minnesota. In Chapter 2, I will review the existing literature on the use of E-reading in the classroom and independent reading with ELLs.

## CHAPTER 2: LITERATURE REVIEW

The central question of this capstone is, *How can elementary teachers best use independent reading with E-Books with ELL students?* In Chapter 1, I discussed some features of E-Books that seem like they may benefit ELLs. These include text narration, highlighting of words as the text is read aloud, links to vocabulary glossaries and dictionary entries, and access to books at different levels, on different topics, and in different languages.

In Chapter 2, I will look at pertinent research to determine if and how such features are indeed likely to benefit ELLs. Because I could find only two studies that directly tested the use of E-Books with ELLs, most of my sources fit into one of two other categories. The first category is research and theory on the use of independent reading to promote language acquisition. Stephen Krashen has long been a proponent of encouraging English learners to read on subjects they are passionate about, and I will look at some of his work as well as research by those who have studied independent reading after him.

The second category of my sources is the use of E-Books with students in general and especially at-risk students and emergent readers though not ELLs specifically. In this area, Ofra Korat and Adina Shamir have been at the forefront of research into the effect of E-Books on comprehension, decoding, vocabulary, and concepts about print.

By combining these two categories, I hope I can develop well-informed notions about how ELLs may benefit from E-Books and what teachers can do to promote growth through E-Reading. These notions will inform my work on my intended project--a website for elementary teachers with links, reviews, advice, and resources for using E-Books with ELLs.

### **Overview**

This chapter will discuss what features of E-Books are likely to enhance or detract from the reading experience for ELLs as well as what research indicates teachers should do to help students. Most of my sources reflect the view that independent reading and E-reading is effective in promoting language and reading skills with one source showing the opposite. However, the authors discuss limitations in the use of E-Books and how some features are helpful and others are not.

Four main themes emerged in my review of relevant literature. In the first section, I will discuss how the reading of E-Books can provide comprehensible input to students which pushes their language abilities. Then, I will discuss how E-Books can meet the needs of emergent readers, a population which overlaps with ELLs. In the third section, I will review research and expert commentary on how specific interactive text features can help or hinder the E-reading experience. In the last section, I will look into research on the role that adults can play in promoting and facilitating great reading experiences.

### **How E-Books Provide Comprehensible Input**

I will first define the theory of comprehensible input, explain how it relates to reading, and unpack the factors that facilitate learning language from the process of reading. Then I will discuss how well E-Books are likely to provide the comprehensible input that ELLs need.

### **Factors That Facilitate Comprehensible Input**

Since the 1970s, Stephen Krashen has argued that we acquire new language by understanding messages that model new words and structures. Such a message may be provided by someone giving you directions on a trip abroad or by a teacher giving a demonstration of a science concept. Similarly, literacy is acquired when readers understand the words in a book. This way of acquiring language is known as *comprehensible input*.

Krashen and Bland (2014) review research on independent reading to provide us with an idea of what readers need to optimize comprehensible input. They refer to Krashen's three-stage model of academic language acquisition and explain what conditions need to be met for readers at each stage. Their aim is to explain what school libraries need to provide to students.

**Compelling stories and choices facilitate comprehensible input.** In Krashen's first stage of language acquisition, students need to hear a lot of stories and books read aloud. Krashen and Bland (2014) believe that it is critically important that these books and stories are engaging. Stories for students at these age often employ silly humor and sound devices to keep readers interested.

In the second stage, students need to be moving into self-selected reading. They need access to many books that appeal to their personal interests. Krashen and Bland (2014) argue that the best books for providing comprehensible input for readers at this stage are not only interesting but “compelling” (p. 2). Compelling books are those which we can get absolutely “lost” in. We understand the story or information without even being aware of the complicated processes of interpreting language we are using to do so. The authors note that a good library must have adventure stories, horror, fantasy, graphic novels, teen romance, books with protagonists of different genders and ages, and non-fiction on popular interests of young readers.

In the third and final stage, young people begin specialized reading in order to learn more about specific topics. This is the phase at which they are exposed to difficult texts and academic language with which they are not familiar. And yet students are still not trying to get better at reading or to learn new words; rather they are trying to find out more about a particular passion. To accommodate these voracious readers, libraries must have many technical books on the same subjects so that students can engage in the reading of many different books on their favorite topics.

**Narrow reading facilitates comprehensible input.** Hansen and Collins (2015) bolster Krashen and Bland’s (2014) claim that independent reading helps students acquire language. Specifically they prove that narrow reading (reading numerous books by the same author or on the same topic) can be effective for ELLs. They gave vocabulary and literacy assessments to ELL and mainstream fourth graders in the fall and in the spring. They found that for both groups, the amount of narrow reading that students engaged in

predicted their vocabulary growth, although the effect was not clear on reading comprehension. The author's postulate that when students read narrowly, they tend to be exposed to the same vocabulary many times, facilitating acquisition of new words. Thus teachers should encourage students to read narrowly.

**Culturally relevant texts facilitate comprehensible input.** Ebe (2010) proves that when students read texts which are culturally relevant they not only enjoy them more, but also understand them better. She provides teachers with a checklist for evaluating the cultural relevance of books for their particular readers. On this checklist, a book will have a higher cultural relevance score for having a protagonist the same age and gender as the reader, for being set in the modern day, and for the characters speaking as the reader does. For her study, Ebe (2010) intentionally picked one book that would not be culturally relevant to the nine ELL students with whom she was working and one book that had a similar lexile level but would be culturally relevant. She found that students made fewer meaningful errors when reading aloud and gave better retellings for the culturally relevant text.

**Year-round access to books facilitates comprehensible input.** Finally, Allington and McGill-Franzen (2008) show that it is critically important that students have access to books over the summer. From 2001-2004, they organized a book fair for a randomly selected group of 842 free-and-reduced-lunch eligible elementary school students. Students got to choose twelve books they wanted to take for the summer for free. After three years of participation, students in the experimental group outperformed their peers on the Florida Comprehensive Assessment for reading. While the effect size

(0.14) is relatively modest, this result is remarkable given that students in the experimental group were not given any special instruction--only access to books they wanted to read.

### **How Well Do E-Books Provide Comprehensible Input to ELLs?**

In the last section, I looked at studies of independent reading as a source of comprehensible input. In this section, I will look specifically at sources that are relevant to the question of how well E-Books provide comprehensible input.

**Students understand digital texts and print texts equally.** Some teachers may believe that the format of E-reading will make it more difficult for students to comprehend than E-Books. As I will note later on, some interactive features can be distractions that detract from comprehension. But in general, there is no evidence that the E-Book format makes texts harder to understand.

Taylor (2011) randomly assigned seventy-four Intro to Psychology students to read a chapter from an economics textbook either in digital or print form. Students in both groups were given a multiple-choice test right after reading and again a week later. There was no significant difference between the performance of the two groups. This study shows that it is likely that students can understand what they read just as well on a computer screen as on a paper page. This means that there is probably nothing inherent to E-reading that invalidates it as a source of comprehensible input.

While Taylor (2011) showed that E-reading is as comprehensible as print-reading to college students, Shamir and Baruch (2014) show that students as young as preschoolers can access academic content from E-Books. They studied fifty-two Israeli

preschoolers who were identified as at risk for a learning disability (Israel uses this label for developmentally delayed students who are not yet school-age). The experimental group received an intervention in the form of an E-Book while the control group participated only in the regular preschool curriculum. The E-Book featured a whimsical narrative about a grandfather who takes his grandson to school on a bus. The narrative was constructed to teach students about ordinal numbers and real-world concepts of addition. It featured an interactive dictionary where students could click on links to review key terms and hotspots with links to relevant demonstrations of the arithmetic in the story. They found that the experimental group achieved more growth than the control group in each area in which they were assessed--ordinal numbers, concepts of addition, and vocabulary. While I would be interested in knowing what would happen if they assessed another intervention group that accessed the book via print, this study nonetheless shows that students from a young age are capable of processing input from E-Books if the E-Books are well-designed.

**E-Books help ELLs learn reading and vocabulary.** I only found two sources that measured the effects of E-Books read in English for English learners, but their results are encouraging. In an after-school program with Korean ELL students, Yoon (2013) had them access English books using a website called Starfall.com for forty minutes twice a week for twelve weeks. At the end of the twelve weeks, he found that students improved by an average of 5% on a reading comprehension assessment and about 4% on a vocabulary assessment. The students also reported more positive attitudes toward reading and believed that E-Books could help them learn English.



Yoon (2013) agrees with Krashen and Bland that motivation to read is a critical component of comprehensible input. He believes that the E-Books on Starfall.com are more motivating to students because of the portability and ease of access and because of the way that multimedia elements enhance the stories. He notes that background music adds drama to the reading experience and that the graphics in Starfalls' E-Books look much better than pictures in most print books.

**The power of vocabulary glossaries.** But Yoon (2013) also identifies another factor as important in helping students develop vocabulary. He believes that the way that words in the text on Starfalls' linked to a glossary was a particularly helpful feature.

Leacox and Wood Jackson (2014) also believe that hyperlinks to glossaries in E-Books can help ELLs learn vocabulary. They studied twenty-four Spanish-speaking preschool and kindergarten ELLs in a summer program for migrant students where they listened to a storybook in English three times. In the control condition, a small group of students listened to the story read by a research assistant each time, but in the experimental group, after hearing the story read by the research assistant once, they accessed the E-Book where they could listen to the story and click on target vocabulary words to hear a short explanation of the word in Spanish. The experimental group outperformed the control group on a vocabulary posttest.

### **Summary of How E-Books Provide Comprehensible Input.**

These sources all show that E-Books can be a source of comprehensible input and that specific features like graphics and vocabulary glossaries can make them more even more comprehensible, resulting in accelerated language acquisition.

## **How E-Books Can Help Emergent Readers**

Comprehensible input is one way of thinking about how students can learn from reading. However, comprehensible input is mainly concerned with how students acquire language in general. In this section, I will focus on a narrower group of English learners (those who are also emergent readers) and on a narrower area of language development (basic literacy).

Many English learners at the elementary level will fall into the emergent reader category. These are readers who are still learning the basics about how written words can signify meaning. According to Bates, Klein, Schubert, McGee, Anderson, Dorn, McClure, and Huber Ross (2017), these are readers who are working at the Fountas and Pinnell levels A to G or in Grade Equivalency terms about 0.0 to 1.6. Note that while mainstream reading instruction moves beyond these texts by second grade, with English learners and students with interrupted education, it is not uncommon for students in higher grades to still be reading at this level and working to develop these concepts.

While the literature does not have a lot of information on how E-Books can specifically benefit English learners, it does provide a wealth of information on how E-Books can be helpful to emergent readers. Many E-Books are specifically designed with these readers in mind, so it is worth looking at the research to evaluate what these students need and how well E-Books may be able to provide for these needs. In my review, I found six main areas where emergent readers need to develop. In each section below, I will explain this area and discuss the strengths and limitations of E-Books in developing these areas.

## **Concept About Print**

Perhaps the area of growth which most specifically defines emergent readers is Concept About Print (CAP). CAP refers to information other than phonics that readers must know to be able to process written text into meaning. These are things that successful readers no longer think about but that can confuse early readers.

Shamir, Korat, and Fella (2010) studied 110 Israeli five to seven-year-olds who were identified as at risk of having learning disabilities. They designed a study in which the control group participated in the regular kindergarten curriculum, a print book group was read to by the experimenter in six different sessions, and the E-Book group engaged in the text with narrated E-Books on their own devices for six sessions.

The researchers modified an existing CAP test to develop a 16 question CAP test that was specific to the Hebrew language. These included questions like, “Do we read right to left or left to right?” The researchers found that the print group and the E-Book group made similar gains on the CAP assessment and each group outperformed the control group.

It is clear that under the conditions of this study, E-Books were equal to print books in teaching students CAP. However, not all E-Books have the same features, so we have to consider what features may make a difference. The authors believe that the way the E-Books highlight the text as it is being narrated helps learners understand the flow of text. They also think it is important for the readers themselves to (digitally) turn the pages of the E-Book just like with a real text.

Meanwhile, Bates et al (2017) note that beginning readers need to learn text to speech correspondence as they are listening to and looking at the text. This means they need to be paying attention to the words being read at the moment they are being read. To read in English, they also need to master the return sweep which is the term for how our eyes move all the way back to the left and down when we finish a line of text. To accomplish this, they recommend E-Books not have too many auditory and visual special features that may distract early readers from paying attention to the written words and the narration.

### **Story Structure**

Another need for emergent readers is beginning to read and understand texts that tell a complete narrative. While texts for very early readers tend to rely on highly patterned sentences with humor and sound devices rather than story development (i.e. *Goodnight Moon*), as readers progress they must begin to understand narrative elements including setting, characters, conflict, plot, and resolution. Jalongo, Dragich, Conrad, and Zhang (2002) discuss the role of pictures in helping emerging readers derive meaning from a story, and argue that even wordless picture books help students acquire concepts about story structure. When evaluating how E-Books can be helpful to emergent readers, teachers should try to determine how well the pictures make the story elements clear.

### **Phonological Awareness**

Phonological awareness refers to the ability to manipulate units of sound and put them together to decode words or playfully create new words. It includes skills like identifying rhymes or consonance and assonance. Emergent readers need to develop

phonological awareness in order to move from listening to text to eventually decoding words on their own. In their most basic forms, neither adult read-alouds nor E-Books do much to cultivate phonological awareness, but both experiences can be tweaked to help students with these skills.

To measure the effects of E-Books and print book read-alouds on phonological awareness, Shamir, Korat, and Fella (2010) designed a test of sub-syllabic segmentation. They asked their young readers to break apart two-syllable words into three or more chunks of phonemes (basic units of sound). They found that the experimental group who read E-Books made more gains post-intervention in this assessment than the print book group or the control group. The researchers suggest that the pronunciation guides included in the E-Book for difficult words may have helped the learners acquire the ability to segment words.

Several other features that some E-Books employ may also be helpful in the development of phonological awareness. Bates et al (2017) also note that many E-Books take the form of songs and nursery rhymes. They suggest that by emphasizing rhymes and sounds, these texts can help students acquire phonemic awareness.

### **Sight-Word Fluency**

While emergent readers will need to learn to use their knowledge of phonics to decode new words, they also need to develop a bank of words that they do not need to sound out because they instantly recognize the shape of the print as that particular word. This skill is called sight word reading. It is critical because it is faster than phonetic decoding for words that are high-frequency in print and because many words in English

cannot be sounded out accurately using typically taught phonetic rules. For example, if you try to sound out the word *the* or *I* you will be off the mark.

Bates et al (2017) note that readers in the early stages of emergent reading, those reading at around Fountas and Pinnell levels A-C, need books to be written in a specific way to help them begin to recognize sight words and decode sentences independently. Effective books for these readers will use the same sentence structure over and over. For example, if the first page says, “I saw worms crawling”, the second page might say, “I saw birds flying.” Young readers can use the repeated words as anchors and can begin to memorize some of the words as sight words, easing the burden of decoding. The unique words on each page should be possible to infer from the pictures. For most books written at this level, a page should only feature a picture and a single line of text so that students are not confused by the return sweep. Bates et al (2017) believe that repetitive language structures are important whether the book is to be accessed in print or electronically.

However, Bates et al (2017) also caution that E-Books with too many animations and interactive links will detract from students’ learning of print to word correspondence because students will not be paying attention to the text as they are listening. Morgan (2013) suggests that teachers assess E-Books by making sure that the type size is large enough and amount of text per page is low enough that beginning readers can pay attention to individual words.

### **Vocabulary and Oral Language**

From hearing books read aloud, students will be exposed to language that stretches beyond what they typically hear in their everyday lives. In my discussion of

comprehensible input, I have already cited Yoon (2013), Leacox and Wood Jackson (2014), and Shamir and Baruch (2014) to show that E-Books with links to glossaries can be effective in helping students learn words. However, in this section I will examine how books promote vocabulary specifically for emergent readers.

I already cited from Shamir, Korat, and Fella (2010) to show that E-Books can promote CAP and phonological awareness more effectively than print books. However, these researchers also administered a vocabulary pretest and posttest to their young Israeli readers. They found that both the print book group and the E-Book group made significant gains on the assessment while the control group who received the regular kindergarten curriculum did not. The E-Book group performed slightly better than the print book group in vocabulary gains.

This data suggests that E-Books can indeed help emergent readers learn vocabulary, but what features of E-Books facilitate this learning? Shamir, Korat, and Fella (2010) suggest that when adults read aloud to young readers, they tend to offer brief verbal definitions for difficult vocabulary only. In contrast, the E-Books used in their study provided links to multimedia tutorials on the words which included pictures, videos, and sounds which students could trigger themselves. Another advantage is that because the learners are actively involved in choosing interactive links, they are more likely to pay attention whereas during a read aloud with adults, children may lose concentration while the adult tries to explain a word. Therefore, it is likely that interactive, multimedia vocabulary glossaries are effective for emergent readers.

### **Prosody**

In reading, prosody refers to expressive reading. This includes such nuances as phrasing (i.e. pausing between phrases and at suspenseful moments), emphasis (drawing attention to important words with the voice), rate (changing the speed of the words to match what is happening in the text), and intonation (i.e. making dialogue sound realistic by rising the pitch for a question). From listening to highly-skilled adults read, students themselves eventually learn to read with expression and an appropriate oral rate. This helps their reading be comprehensible to others and also helps them to make meaning of the text for themselves. While I did not find any studies that examined the effect of E-Book reading on prosody, several sources speculated about the impact that E-reading might have on this important area of development for emergent readers.

Bates et al (2017) suggest that, when it comes to learning prosody, recorded human narration is better than the robotic readings that some texts provide. They specifically criticize RAZ-Kids for the narrations being too choppy. Dalton (2014) writes a guide for teachers to create their own E-Books and recommends that teachers record their own narrations rather than use automatic text-to-speech tools. She notes that, “As useful as TTS [text-to-speech] is, synthetic voices simply can’t compare to the expressive reading of a real human being who knows the text and can use his or her voice to express the characters and plot of a story, the tone of a poem, or the curiosity of an informational text.”

### **Summary of E-Books and Emergent Readers**

Overall, the research indicates that emergent readers have six particular needs that make them different from more developed readers. While we do not have much data



comparing E-Books to print books in these areas, the research seems to indicate that with the right interactive features E-Books can perform better than print books at promoting vocabulary and phonemic awareness. With regards to CAP, knowledge of story structure, and sight word fluency, there is no reason to think that E-Books cannot perform as well as print books. With regards to the modeling of prosody, we need to learn more information, but for the time being, teachers should seek out E-Books with expressive human narrations rather than robotic text-to-speech readings.

### **E-Book Text-Tools: Help or Hindrance?**

E-Book text-tools refer to all of the special features that books in the electronic format can offer beyond their print counterparts. Some of these resources are interactive, meaning that students can trigger them voluntarily. For example, many E-Books include links on difficult words in the text that will take students to a word glossary. Other text-tools are automatic. For example, the narration and other special audio features like background music in many E-Books for children will play on their own each time the book is read. The presence of these features in E-Books that are still designed to mimic print books in other respects with turnable pages and illustrations creates a reading experience that is something of a hybrid of traditional book reading and web browsing.

In my discussion of comprehensible input, I established that interactive vocabulary glossaries seem to be helpful to students in learning new words though they seem to have limited effect on text comprehension. Leacox and Wood Jackson (2014) show that bilingual glossaries are particularly effective. In my discussion of the needs of emergent readers, I have also established that they benefit from narration recorded by real

humans and automatic highlighting of text as it's being narrated. However, a few of my sources specifically examined the impact of text-tools on the reading experience, so in this section I will look into those.

### **Games**

Some E-Books designed for very young readers actually include links to games that are ostensibly related to the text. Research indicates that these games are fun, but do not promote engagement in reading. De Jong and Bus (2002) designed a study of such E-Books with a sample of thirty-six Dutch kindergarteners over six sessions. They divided the participants into four groups. A control group did not engage with the target book at all. One experimental group was read to by an adult with a print book. Another experimental group engaged with the text in an E-Book but with restricted access to the games. The final group engaged with the text in the E-Book and were free to play the games to their heart's content.

The researchers tested students' recognition of words from the target book before and after reading. The print book group made the largest gains while the restricted game group also made significant gains. It is not surprising given the age of the students that the unrestricted group made less gains. However, they still dramatically outperformed the control group indicating that they did attain some recognition of the target words during their E-Book interaction.

The same pattern held when students were prompted to use the pictures to do a retelling. The print book group reproduced the most language from the book in the

retelling, followed by the restricted group, followed by the unrestricted group, followed by the control group.

The researchers conclude that for students at that age level, the games were simply more enticing than the story, so students did not read the book as many times as the other two groups. For teachers who work with younger students, this is an important consideration.

### **Vocabulary Glossaries**

I have already cited several studies where the researchers believed that vocabulary glossaries were an effective component of intervention, but these researchers were all dealing with several variables. Korat and Shamir (2012) studied this variable directly. They sampled 288 pre-kindergarten and kindergarten Israeli students. Half were assigned to the intervention condition where they engaged with an E-Book in which some of the words linked to a computerized dictionary. On a test of word meaning and word reading, the intervention group outperformed the control group for the words that were directly supported, but not for other words that were in the text but not part of the computerized dictionary. This indicates that teachers cannot assume that students will learn new vocabulary from incidental exposure and context-clues (at least for early elementary students). The presence of a vocabulary glossary or other form of vocabulary support is a welcome addition to an E-Book, especially if students can activate the links themselves.

### **Music**

Many E-Books include songs and nursery rhymes where the text appears as normal, but is sung rather than simply read in the audio. Jalongo and Riblett (1997)

found that the use of songs can promote phonological awareness. Bates et al. (2017) also suggest that the songs found on many E-Books for children can promote phonological awareness.

Other E-Books are normal stories but include background music designed to enhance the dramatic effect of the narration. Bates et al (2017) argue that music could distract from actively watching the words, impeding students' progress learning sight words and text-to-print correspondence. On the other hand, they suggest that background music and graphics which help set a mood may make reading more engaging and help readers derive meaning from the text.

### **Pictures**

Whether in print or electronic format, pictures are a critical scaffold in the meaning making process for young readers. I have already cited Jalongo, Dragich, Conrad, and Zhang (2002) to suggest that teachers should look for pictures that make the elements of a story (characters, setting, conflict) clear to early readers. Jalongo (1988) gives us further insight into what teachers should look for in the pictures of picture books. She notes that pictures can be helpful to young readers but recommends teachers look for aesthetically pleasing illustrations, pictures that compliment the text well, accurate depiction of racial groups, and a balance between pictures and text that is appropriate for the age of the reader.

### **Student Gender**

Gender does not appear to affect a student's ability to navigate books presented in a digital format. Huang, Liang, and Chiu (2013) set out to see if the stereotype that boys

are more comfortable with computers than girls affected their ability to comprehend electronic text. Noting that boys generally lag behind girls in reading tests in print formats, they wondered if boys would take to the digital format more naturally than girls and thus close the gender achievement gap. After having 166 Taiwanese elementary students try E-Books, students of both genders expressed comfort with them in post-surveys. Furthermore, girls outperformed boys in a retrieval test on the E-Books they read. The authors note that this finding is largely in line with previous studies of gender differences in reading outcomes using print books. Therefore, while there are not many studies on this subject, for now, there is no reason to think that E-Reading privileges either gender or is dramatically different from print reading in terms of accessibility to students of any gender.

### **The Role of Adults**

In a world with self-driving cars on the horizon and where artificial intelligence is making many human jobs obsolete, we might think that using E-Books means turning over teaching to devices. On the contrary, many of my sources illuminate the essential role that human teachers and parents play in promoting and facilitating great reading experiences for students.

Segal-Drori, Korat, Shamir and Klein (2009) found that reading E-Books with adults is more effective than reading E-Books alone but also more effective than reading print books with adults. So while a viable case can be made that E-Books can eventually replace print books, it is harder to make the case that E-Books can replace adults. But if adults are no longer needed to read aloud since E-Books have narrations and since adults

are no longer needed to for vocabulary support since E-Books have glossaries, what are the functions that adults perform that make them indispensable?

Sanden (2012) set out to determine how effective teachers encouraged positive reading behaviors. She ended up observing and interviewing eight elementary teachers who were determined by a vetting process to be effective reading teachers. She found some common philosophies and techniques among them.

### **Setting Guidelines**

First, Sanden (2012) observed that while students were allowed to choose their own books, they were given guidelines to choose books at an appropriate reading level. In some schools, books are already tiered according to a system like Fountas and Pinnell or Lexile level, and students are required to choose books from near their determined level. In other cases, students are told to use the “five-finger-test” in which they must find a book where there are fewer than five words they do not know on a single page. This shows that regardless of whether books are accessed in the digital or print medium, effective teachers try to make sure students are reading at an appropriate level.

Shamir and Korat (2006) think that teachers must set guidelines when students use E-Books. They argue that E-Books, much like crayons or globes, are tools that can be used effectively or ineffectively. They note that a software program that might be developmentally appropriate for one learner might not be for another.

### **Creating the Culture for Reading**

Second, according to Sanden (2012) teachers must effectively manage independent reading behaviors in their classroom. This includes explicitly teaching and

modelling positive reading behaviors throughout the year. In one classroom, the teacher and students brainstormed strategies for building reading stamina and recorded them on a poster. Teachers do not necessarily expect the room to be silent, but they vigilantly supervise to see that students are on task.

### **Promoting the Love of Reading**

To these teachers interviewed by Sanden (2012), the love of reading is not spread by accident but by design. The physical layout of the room at the elementary level will often include comfortable furniture for reading like sofas or bean-bag chairs. The reason that many teachers do not demand that the reading be silent is that they want reading to be a social event where students are free to share new learning out loud. While none of the teachers she interviewed actually read themselves during student-reading time, some delivered book-talks to the class to make it clear that they themselves were passionate readers.

### **Connecting Instruction and Independent Practice**

Finally, teachers also challenge students to become great readers through instruction during other times and routines during independent reading. According to Sanden (2012), teachers typically model and explicitly teach reading strategies during read-alouds. Students are then asked to use these same strategies during their own reading. Some teachers encourage or require students to share text connections. Students are encouraged to “solve their own reading problems” (Sanden, p. 227), but teachers are available for support.

Vieber-Nielson (2016) describes a similar approach where teachers first use direct instruction and then have students apply what they learned in their own reading. She found that when students were pre-taught spelling patterns before reading, in post-reading they did better than their peers at both pronouncing the words and spelling the words.

The teachers Sanden (2012) interviewed were united in their belief that some accountability for reading is appropriate for elementary students, and the accountability task can also be a chance to link independent reading to something they learned in formal instruction. In one lesson that Sanden observed, students were asked to draw a character from their book and then share about the character with the full group.

### **Summary of the Role of Adults**

In summary, even though E-Books fulfill functions for young readers that used to belong to adults like reading aloud and defining words, adults remain a critical part of making independent reading successful. They are essential for providing guidelines to make sure students are reading appropriate texts, encouraging the love of reading, creating a culture where students are accountable for reading, and helping students apply strategies in independent reading.

### **Conclusion**

The purpose of this review of literature was to determine what researchers have already found related to my research question--*How can elementary teachers best use independent reading with E-Books with ELL students?* Since I only found two sources that directly tested the use of E-Books with ELLs, I attempted to find other research topics that were applicable to this question. One topic was under what circumstances



independent reading would be effective with ELLs. The other topic was under what circumstances E-Books were effective for the development of reading ability for students in general.

I first discussed under what circumstances E-Books might be a good source of comprehensible input to promote language acquisition. I concluded that whether accessed electronically or on paper, books are most likely to provide comprehensible input if students have access to compelling books, if they have access to the books year-round, if students read narrowly, and if they read books which are culturally relevant to themselves. According to the research I reviewed, E-Books are as comprehensible as print books under normal circumstances and are most likely to promote comprehensible input if they use multimedia to make the stories more compelling and if they provide a glossary to support key vocabulary.

I then discussed the features of E-Books that may support emergent readers. The research indicates that with the right interactive features E-Books can perform better than print books at promoting vocabulary and phonemic awareness. With regards to Concepts About Print, knowledge of story structure, and sight word fluency, there is no reason to think that E-Books cannot perform as well as print books. With regards to the modelling of prosody, teachers should seek out E-Books with human recorded narrations rather than automatic text-to-speech narrations.

In the third section, I discussed how text-tools can benefit or detract from the reading experience. I found that glossaries, music, and pictures are probably helpful

while games are not. Students' ability to navigate these text-tools does not depend on gender.

In the final section, I discussed how adults still play a critical role in students' independent reading. Adults set the culture for reading, promote strategic reading, cultivate the love of reading, and set important guidelines for readers to choose appropriate books.

In the next chapter, I will explain how I will synthesize these findings in order to create resources for teachers to access on a website. Having studied what conditions make E-Books effective, I believe I can now evaluate E-Books with a critical eye, and I will publish reviews of commonly used E-Book websites including RAZ-Kids, EPIC!, and Tumblebooks. I will also create other articles that will help teachers structure independent reading to be successful in their own classrooms and help them evaluate how well books meet their students' needs.

### CHAPTER 3: PROJECT DESCRIPTION

The central question of this capstone is, *how can elementary teachers best use independent reading with E-Books with ELL students?* My goal from the outset has been to create a website for teachers that will provide resources that help them use E-Books with ELLs. In Chapter 1, I discussed some features of E-Books that may benefit ELLs and why I am passionate about finding ways to promote independent reading.

In Chapter 2, I searched for relevant literature on E-Books and independent reading with ELLs. The research taught me under what conditions E-Books can provide comprehensible input for language acquisition, how E-Books can support emergent readers, how special text tools can enhance reading, and how adults play a critical role in supporting readers.

I believe that what I learned in researching for Chapter 2 will be valuable to other teachers, so I aim to create a website in which teachers can access this information in a convenient way. In this chapter, I will provide an overview of my website and explain the framework of web-design that informed the content and layout of my website. I will also state my rationale for choosing a website rather than another form of teacher professional development and describe my intended audience. Finally, I will provide a detailed description of what my website includes and the timeline in which I complete it.

#### **Project Overview**

I developed a website for teachers to support them in their efforts to use E-Books with ELLs. By accessing my website, they can learn about websites with E-Books that I have reviewed and read about how I believe these books support the needs of ELLs. They can also learn about what ELLs need so that they can choose books and websites themselves. They can get advice on developing policies for their classrooms and schools that will maximize passionate reading. They can access activities to hold students accountable for reading (without killing the joy of free reading). I give them suggestions of before-reading direct instruction (with minimal teacher prep) and reflection activities (with no teacher prep) that help students extend their thinking and practice speaking or writing.

### **Project Framework**

As I had never created a website before, I needed to learn not just about the technical process but also to find a framework to help think about the ideal design and layout. I followed the advice of Hasan and Abuelrub (2010) to help me plan my website. These authors synthesized research and ideas about determining the quality of a website in order to propose their own all-encompassing checklist for web-designers. Their criteria are organized into four dimensions: content, design, organization, and user-friendliness.

#### **How to Ensure a Website has High-Quality Content**

The first dimension of website quality proposed by Hasan and Abuelrub (2010) is content. Their content criteria are mainly concerned with the accuracy and utility of the information presented.

A website with high content-quality is updated frequently. It states its objectives and audience clearly and gives the right level of detail for the purposes of that audience. Ideally, it should be available in multiple languages and provides options for receiving information in multiple ways (videos, texts, graphics etc...). A high content-quality website is free of errors in spelling and grammar, presents information in an objective manner without clear biases, and is transparent about its sources and provides contact information for the developer.

For my project, I was able to meet all of these criteria except for having the website available translated into other languages. I will discuss how I wrote the content of my website later in the project timeline and description section.

### **How to Ensure a Website has High-Quality Design**

The next dimension of quality that Hasan and Abuelrub (2010) suggest evaluating is design. This domain is narrowly defined as the visual appeal of what the visitor sees on the screen. However, the authors argue that this component has a substantial impact on how people engage with web materials and how long they spend on a website.

A website with high-quality design looks attractive and pleasant because of pictures and animations and makes visitors feel cheerful. It balances pictures and text and uses a light background color with no more than four text colors on a single page. Generally, they limit videos and sounds so that pages do not load too slowly. They use text as an alternative for non-text elements (i.e. if there is an embedded video or audio, you can also read a written transcript of it). Obviously, websites should use readable text

and only one font size for all text other than titles. They allow empty background space between elements to avoid clutter.

I believe I was able to meet these visual requirements in all of my posts, and I will discuss how I customized the look of my website later in the project timeline and description section.

### **How to Ensure that a Website has High-Quality Organization.**

Hasan and Abuelrub (2010) also suggest that developers should reference their criteria to determine the best way to organize their website. When we design websites, we must recognize that people will come looking for specific information rather than to study the entire site. For this reason, the website needs to be easy for users to navigate.

The best organization occurs when a website includes an index on the main page that shows the visitor the basic areas of the site. It should have a title at the top of each page so that the visitor knows where they are within the larger structure. It should use a generally consistent layout for each page and have links that work properly. Finally, it should have some kind of organizational logo or sign of the website on every page.

I was able to meet all of these criteria in creating my website. I will discuss how I created a sight identity and organized my pages in the project timeline and description section.

### **How to Ensure a Website is User-Friendly**

The last dimension of website quality defined by Hasan and Abuelrub (2010) is user-friendliness. While organization refers to how easily the visitor can find specific

pages within the website, user-friendliness refers to how easily they can access everything else including multimedia and interactive features.

To be user-friendly, a website needs to have an easy-to-remember and intuitive address. It should have short loading times and work properly in multiple browsers and with multiple screen sizes. It should have few or no advertisements and full-time availability. Websites can also have additional features that can help users find what they need. These might include a Frequently Asked Questions page and an internal search tool.

My website does feature a simple and intuitive address, short loading times, and compatibility with different browsers and devices. In this project timeline and description section, I will discuss how I customized it to be user-friendly.

### **Summary of Project Framework.**

To develop a website, I located a framework that I believed I could use to make sure my website is high-quality. This framework evaluates websites along the dimensions of content, design, organization, and user-friendliness. In the next section, I will explain why I have chosen a website as a means of sharing information on using E-Books with ELLs.

### **Choice of Project**

I chose to create a website rather than to write another form of professional development, such as a presentation for a group of educators. I believe a website best serves my content for four main reasons: the audience for this content is relatively niche, some visitors may only need certain resources from my work, E-Book websites can be

externally linked from my website, and my content is information and resources which can be succinctly shared online.

### **Narrow Audience of Teachers**

If I were to develop a presentation for teachers on using E-Books with ELLs, it would be hard to determine what venues would be appropriate for such a presentation. I could probably get an audience at a conference specifically for ELL teachers, but I believe my content is also valuable to mainstream elementary teachers who have ELLs in their classes. I could present at a conference for elementary teachers, but I am not sure how many people would sign up for a professional development session specifically on using E-Books with ELL students. What I intend to teach to teachers is also of limited utility for teachers who do not have a 1:1 device-to-student program in their schools.

That said, as I explained in Chapter 1, ELLs and devices in classrooms are both becoming more prevalent. This means that my potential audience is always changing. In theory, an ELL teacher in Ohio who just got iPads in their classroom and wants to research E-Book websites could find and use my website for advice. Or an elementary teacher in Illinois who just received a new ELL student in her classroom and does not know where to start could find my website. A website, rather than a presentation at a conference, allows teachers to access it only when and if it is relevant to them.

### **Some Visitors Will Only Need Certain Resources**

While I hope that my entire website will have value for teachers who are just beginning to use E-Books with ELLs, other teachers may only need to read a certain article. Most of what I intend to create would easily stand-alone and could be understood



and used without browsing the entire website. For example, a teacher who already uses E-Books but wants to find a list of reflection prompts and activities to get students to share what they read could find that on my website. By contrast, a teacher whose school is thinking about getting RAZ-Kids could read my review of that website. In a presentation, both of these teachers would have to sit through an hour long session when they really only were curious about a small portion of the information. And with a website I am not constrained by time, so I can actually provide more information than I could possibly include in a typical presentation.

### **External Links**

I once went to a conference session on educational websites without bringing an internet-enabled device. As a result, I took home a piece of paper with a list of URLs which I promptly lost. Even if I had not lost the paper, it would have taken time to actually type in the URLs and find each of those websites. I am determined not to create this kind of experience for my audience.

Since many E-Books are available on the world-wide web and since teachers will go looking for these resources on the web, it simply makes sense for my resource to be on the web as well. I can use external links so that someone could read my review of an E-Book or website and then visit that page immediately..

### **Best Mode to Deliver My Resources**

It is important to consider the goal behind any form of professional development. If the goal is to inspire teachers, a presentation by an engaging speaker might make a lot of sense. If the goal is to teach a new skill, a workshop where teachers get to practice

with the instruction of the presenter would make sense. If the goal is to promote dialogue or thinking about a particular issue, a panel or facilitated discussion might make sense. However, none of those is my goal.

My goals are to provide teachers who want to know with a rationale for using E-Books including their strengths and limitations, to provide resources and activities teachers can use before, during, and after reading, and to provide reviews of E-Book websites for teachers to quickly compare and contrast them. While I could present this information and these resources in a Powerpoint presentation, it would likely be long, and since it would not be very interactive, there is really no reason why this content would need to be taught in a face-to-face presentation or workshop.

### **Summary of Choice of Project.**

I chose to develop a website rather than another form of professional development because the audience for this content is relatively niche, some visitors may only need certain resources from my work, E-Book websites can be externally linked from my website, and my content is information and resources which are easily conveyed online. In the next section, I will explain the intended audience of the website I will develop.

### **Audience**

The audience for this project is ELL teachers and mainstream elementary classroom teachers who may have ELLs in their class. The type of school or location within the United States does not, in my opinion, affect what teachers could learn from the website I intend to create, but the project will focus largely on how E-Books can help with literacy and language development in English.

### **ELL Teachers**

The main role of ELL teachers is to help students acquire language to use for both social and academic purposes as quickly as possible. Most ELL teachers are probably already familiar with Stephen Krashen's comprehensible input hypothesis which I described in my review of literature. While ELL teachers generally believe it is important to engage students in speaking and writing to communicate, they also recognize that students can learn a lot about expression in English through reading. However, independent reading is difficult for ELLs without proper scaffolding, and guided reading is only effective when you have a group of students who are at a similar language level. As I speculated in my introduction, E-Books may solve some of these challenges. Students can listen to books at their level with limited teacher support allowing teachers to circulate and work with students individually.

My website will also give ELL teachers suggestions for speaking and writing activities. Through these activities, students share what they read and practice taking the vocabulary and language structures from their books and using them in other language domains.

### **Mainstream Elementary Teachers**

The goal of mainstream elementary teachers is for all students to learn grade level content richly and deeply. To do so requires background knowledge, vocabulary, and in the upper elementary grades, literacy skills. As more and more ELLs arrive in classrooms around the United States, teachers are finding that students often lack these prerequisites, and they do not know how to leverage the abilities that students do possess.

Elementary teachers sometimes feel they are powerless to help ELL students since they are not highly trained in working with ELLs. Before one of my students came to my school, he enrolled in a small charter school right after arriving from Mexico. Not knowing what to do with him, his teacher at that school had him copying books into a notebook, perhaps hoping he would learn some English that way. But after two months in that school, he came to me still knowing only a few words.

I like to think that if my website had existed then, and if that teacher had done a quick Google search, she could have found a much more productive way to support this student. My website will help teachers understand which books are culturally relevant to ELLs, what conditions are likely to promote language acquisition, and how to help ELLs learn to love books.

I have described the audience for my website and how I feel visitors will benefit. In the next section, I will describe some of the content I created for the site as well as the format and the timeline I followed to create the site.

### **Project Timeline and Description**

My final project includes fourteen articles on three main topics arranged in what I believe to be a professional, functional, and easy-to-navigate website. I completed the project in seven main phases: writing the articles, selecting Wordpress as a platform, organizing the articles into categories, creating a site identity, creating a homepage and index, editing, and advertising.

#### **Writing the Articles**

I have written fourteen articles for the website, each of which addresses a different topic. I wrote most of these articles in June and July of 2018 to allow time for me to work on displaying them on the website and getting feedback from my advisers. Some articles, for example the one entitled “What to Do During Independent” reading were relatively easy to write, since I was essentially taking information from my literature review, summarizing it, and rewording it into more casual, friendly language.

The three reviews of E-Book websites which I wrote involved substantially more work. To conduct the reviews, I perused all of the information in my literature review about how E-Books best use text-tools, best provide comprehensible input, are most likely to be culturally relevant to students, and best support emergent readers. I created a massive checklist of what I was looking for as positive characteristics of E-Book websites. Then I spent a few hours on each E-Book platform browsing through the books and other resources to see what features met the criteria I compiled on my checklist and taking notes. Then I was finally able to take my notes and write the full reviews.

I wrote a brief preview at the beginning of each article to help visitors know if that page is likely to contain the information they are looking for. I wrote five articles on how to implement E-Reading in the classroom including what to do before reading, what to do while students are reading, activities to do with students after reading, and two articles about creating a strong culture for independent reading. I wrote four articles on how to evaluate E-Books addressing how to tell if a text is likely to be culturally relevant to your students, if it will support emergent readers, if it will provide comprehensible input, and if the text-tools provided are helpful or just distracting. I wrote four articles in

which I reviewed three popular E-Book websites. Finally, I wrote an article explaining why teachers should consider exploring E-Books as an option in their classroom at all.

### **Selecting Wordpress as a Platform**

In May of this year, I consulted with my technology adviser, Michael Butterfield about the process of building a website from scratch. We determined this process would take too long, and ultimately be unnecessary since the content of my website is a series of articles comprised of mainly text.

I then looked into three online web-design services that allow users to create an account and use templates to build websites without knowing how to code HTML. In the end, I selected Wordpress as the platform on which to create my website. Wordpress has free and paid options. Therefore, I can keep the website running forever without worrying about the cost. While not totally customizable, the pages I created on Wordpress still look reasonably professional and are very usable. In the end, I believe that Wordpress allowed me to create a website which meets the definition of high-quality as defined by the characteristics specified by Hasan and Abuelrub (2010).

Though it was easy to create a Wordpress account, I did not finish formatting the look of the website and controlling how visitors could move from page to page until later.

### **Organizing the Articles into Categories**

In July, once I had written fourteen different articles and had posted them on the Wordpress site, I realized that I needed an organizational scheme to make the website easier to navigate. I grouped my articles into three main topics: “How to Use E-Books in the Classroom”, “How to Evaluate E-Books” and “Reviews of E-Book Websites”. On

Wordpress, I was able to create these three categories and sort each post into one of the categories. This allows visitors to choose the category they are most interested in order to find articles in which they might be interested.

### **Creating a Site Identity**

In late July, I worked on setting up the website and customizing it. Hasan and Abuelrob (2010) point out that the URL which can be used to access a website is one of the most important aspects of user-friendliness. The name of the website and URL need to be easy for people to remember. Wordpress allowed me to choose my title as long as it was not already in use on their platform. To make it as short as possible, I selected “E-Books for ELLs” as my title and secured the URL

<https://ebooksforells.wordpress.com/>.

Visually, Wordpress allows users a lot of freedom to customize the appearance of their site. Except for a small advertisement for their own service which appears in the top right corner, different Wordpress sites can look completely different. Wordpress allows you to start by choosing one of their themes and then continue customizing from there. On my first draft, I selected a theme called “Baskerville” because I was attracted to the fonts and the friendly look of it. However, in the last week of July, I ultimately decided to use a theme called “Intergalactic 2” for a cleaner look. When adjusting the fonts and colors, I knew from Hasan and Abuelrub (2010) that you want only two or three fonts and colors per page. Wordpress also allows you to keep the same formatting for every page which gives the website a unified look.

Wordpress allowed me to choose a site icon which appears on browser tabs. I selected a simple drawing of a computer. It also let me create a tagline. The tagline I wrote is, “A website created to advise teachers on how to best use E-Books to help ELLs learn literacy and language.” According to Hasan and Abuelrub (2010), it is preferable if site logos and taglines display on every single page in addition to the homepage, so I adjusted the settings so that this tagline would display above every article.

### **Creating an Index and Homepage**

One of the last major parts of the website that I created was the index and homepage. I knew from Hasan and Abuelrub (2010) that it was critical to create an index for visitors to easily find what they are looking for. I could not find a template to automatically create an index on Wordpress so I ended up creating one manually. I created a new post that simply listed the article titles under the three main headings listed above. Then I hyperlinked the article titles to the articles themselves.

In July, Professor Scullen remarked when she looked at an early draft of my website that it would be better to see the index immediately upon visiting, so I was able to go into the settings and set the index I created as a homepage. Then another one of my group members remarked that while there was an overview at the beginning of each article, there was no site description on the homepage. I actually had written a site description, but I did not realize that it was only displaying if visitors viewed my personal Wordpress profile, so I took that description and posted it on my homepage above the index.



Finally, I adjusted the settings so that on top of the website description and index, visitors can select quick links to the three main categories of articles so that they can find what they are looking for quickly.

### **Editing and Final Touches**

In the first week of August, I added features based on feedback from my advisers and peers. I added a master reference list with all the research I referred to in each article. I also created a Google Form and linked it onto the homepage. This allows visitors to take a short survey and give me feedback on the website and suggest additions or changes.

### **Advertising the Website**

Most of all, I hope that my website will be helpful for my colleagues within my own district. To this end, once the school year starts back up in September, I will send an email to the teachers and administrators with whom I work containing a link to the website and an offer to meet with anyone and discuss more about reading and ELLs. For the last several years, I have been asked to provide training in working with English learners to all of the first year teachers in the district, so I will also mention and briefly display my website in this session.

The site has been public for a few weeks and has some views, although I think they may just be Wordpress users rather than teachers who are specifically curious about the content. To attract educators within my intended audience, I will post a link to my website on public forums for teachers such as [englishclub.com](http://englishclub.com), [eslcafe.com](http://eslcafe.com), and [atozteacherstuff.com](http://atozteacherstuff.com).

In this section, I have summarized the seven phases in which I completed this project.

### **Conclusion**

The central question of this capstone is, *How can teachers best use independent reading with E-Books with ELL students?* In this chapter, I have explained the framework I have used to ensure that my website is high quality, why I believe a website suits the content I have researched, how I hope both ELL teachers and mainstream teachers can benefit from it, the elements I will include on the website, and the seven-phase process I used to complete it. In Chapter 4, I will discuss what I have learned from this experience.

## CHAPTER FOUR: CONCLUSIONS

The central question of this capstone is, *How can elementary teachers best use independent reading with E-Books with ELL students?* In chapter three, I described the process I used to create a website of resources for teachers who want to use E-Books with their ELL students. My website has fourteen articles organized into three major sections. The first section is called “How To Use E-Books in the Classroom” and serves as a guide for teachers on how to make E-Reading productive. It includes tips for building a culture of independent reading and what to do before, during, and after an independent reading session. The second section is called “E-Book Website Reviews” and reviews three popular E-Book websites: RAZ-Kids, Epic!, and Tumblebooks. The third section is called “How to Evaluate E-Books for Yourself”. These articles train teachers on how to look at a group of books and quickly assess how they support emergent readers, provide comprehensible input, provide culturally relevant stories, and use text-tools.

In this chapter, I will reflect on this final product and what I learned from the process of building the website. I will also revisit my literature review and discuss how my sources influenced my project. I will discuss how my website could inform policy for E-Book designers and for teachers and administrators. I will explain how my project impacts my own teaching and how I hope it can help others. In the last section, I will describe how I hope to make the website better and keep developing it over time.

### **Main Learnings**

In the process of writing the first three chapters of this capstone and building the website, I encountered a few small surprises that taught me more about researching, writing, and teaching.

### **The Value of Research**

As a researcher, I learned to value the work produced by educational researchers more. In working on my literature review, it became clear that my research question was so narrow that I would have to open up my search and only be able to draw tentative conclusions in some cases. Only two sources actually studied interventions using E-Books for ELLs. To find more information, I looked especially at sources on how E-Books can benefit emergent readers and sources on how independent reading affects ELLs. I learned that research on newer technology in education can be hard to find. Therefore, I now value the research that I did find much more than I ever did before. In particular, I am grateful for the work of Adina Shamir and Ofra Korat whose names appear on a combined five of my sources. They have provided the bulk of the information I could find on how E-Books can be effective.

### **Every Section Must Stand Alone**

As a writer, I believe I have improved the clarity of my work by changing the way I think about what I am creating. I know that Professor Manikowski said early in my Capstone Practicum course that each chapter must stand alone. However, the importance of each chapter being independent did not occur to me until later in the process.

I thought about how I approached the research and writing process myself. As I was writing my first three chapters, I did not use one previous Hamline capstone paper as

a model but rather read pieces of many different capstones to get ideas and understand the format. While I would love to have people read my entire paper, I realize that most people who encounter it will come looking for something specific. This means that each chapter and even each section should stand alone and that the index and chapter overviews should make it easy for people to find what they are looking for.

I believe part of the value of my capstone paper is that I have assembled great sources for other writers to potentially use themselves. Some readers might take a look only at the section of chapter two where I discuss the needs of emergent readers and then might go to my references and find the sources I used. Others who are working on a website for a capstone project, might read my chapter three and see what they can learn from the process I used. When I think about these potential readers, I tend to use shorter paragraphs, more subheadings, and more summaries of previous sections which I think makes my whole paper easier to read.

As I was writing the content for my website, I realized that the same concept applies even more in that context. I needed to make sure that visitors could get to the website and quickly use the index to find what they need. A media specialist whose school is considering a Tumblebooks subscription could quickly find my review of it. Or a teacher who wants to boost the engagement of their class in independent reading might only look at my article on using book talks.

I have developed a positive habit of making connections to my own work in my writing. I give a brief summary of my previous work on another topic for those who

want to keep reading, but I also let readers know where to find it in case they are interested in learning more.

### **Front Load Before, Monitor During, and Share After.**

Of course, the reason that I pursued a Masters in ESL from Hamline in the first place was not to become a better writer or researcher but to become a better teacher. I will discuss later in the chapter how I specifically intend to use E-Books in my classroom next year, but in this section, I would like to discuss how what I have learned about using E-Books may impact my teaching more broadly.

On my website, I discuss how teachers can set clear expectations and teach problem-solving strategies before reading, monitor to see if students are meeting the expectations during reading, and have students share what they did and what they learned afterward. Essentially, this three-step process applies not just to E-Books but to any independent work we have students do whether it be a math problem, a science lab, or an art project. As experts in our content area, it is our job to know what information and tools students will need in advance and frontload the work they do succinctly and sufficiently. We also need to be able to check in with students and be observant of the progress they are making on a task. Finally, we need to use activities that have students share what they have learned afterwards. This ensures accountability but also gets students to put ideas into words and reflect on what they have learned and solidify what they want to remember.

### **Literature Review Revisited**

In the previous section, I discussed how the entire process of writing my capstone paper and creating my website taught me about research, writing, and teaching. In this section, I will specifically look back at the process of writing my literature review and how the research I read connects to my website.

### **Sources about E-Books and Emergent Readers**

From Segal-Drori, Korat, Shamir, and Klein (2010), Korat and Shamir (2012), Shamir and Baruch (2012), and especially Shamir, Korat, and Fella (2012), I began to realize that E-Books had great potential to benefit emergent readers, and I learned a lot about how specific text-tools and features impacted their quality. I used these sources heavily in writing three reviews of E-Book websites because I was in part evaluating how well the websites met the needs of emergent readers, and I used these sources to determine what features would be beneficial. For example, I knew from Shamir, Korat, and Fella (2012) that interactive glossaries were helpful for vocabulary building and that turnable pages and text highlighting were helpful for learning concept about print.

### **Sources about Comprehensible Input**

I also evaluated how well each websites' library of books met students' needs for comprehensible input. To do this, I referred to Krashen and Bland (2014) and Ebe (2010) often. Krashen and Bland (2014) enumerated the range of genres that a library should ideally include. Ebe (2010) provided a criteria for evaluating the cultural relevance of books.

### **Source on Managing Independent Reading Time in the Classroom.**

While the reviews portion of my website really drew from almost every source I used in my literature review, the section on implementing E-Book independent reading time in the classroom drew heavily from Sanden (2012). This source was the only one which discussed how effective teachers manage independent reading in their classrooms. Almost every other source I used talked about the books and the students but not the teachers. Since I was creating a website for teachers to use, I obviously needed information on what teachers should do every step of the way, and Sanden (2012) ended up being perhaps my most valuable source. I produced five articles that occasionally referenced other sources but mainly used Sanden. I used her work to establish the core principles of how to facilitate independent reading and then I used my own ideas about how her findings might apply to E-Reading.

### **Project Value and Next Steps**

In the previous section, I explained how the literature review opened my eyes to how E-Books could benefit ELLs and how I drew upon my sources in creating a website. In this section, I will evaluate the website, discuss how it can be used, and how the work I have begun could be taken further.

### **Policy Implications**

**E-Book websites should make small changes.** While I do not necessarily expect anyone from one of the E-Book websites I reviewed to view my website, if they did they would each encounter clear suggestions for what they should change. RAZ-Kids needs to add a wider array in the genres of horror and fantasy, and they need to add human-recorded narrations to their book. Epic! should make the formatting of each book



for early readers consistent. Tumblebooks should add more nonfiction and use fewer animations for their beginning reader books.

**Schools should invest in E-Books.** The preponderance of evidence I encountered suggests that E-Books are as good as print books for learning to read. In particular, if they have an interactive glossary, they are better for learning vocabulary according to Shamir, Korat, and Fella (2010).

I only found one study in which students who read a print book outperformed students who read an E-Book (DeJong and Bus, 2002). When you unpack the likely reason why the E-Book group did poorly in this study, it is clearly not applicable to how most schools would use E-Books. In this study, kindergarteners were essentially allowed to read the E-Book or play a related game. Not surprisingly, many spent most of their time playing the game. However, they still outperformed the control group who did not read the book at all at spelling and pronouncing the target words. Therefore, I believe it is fair to say that subscriptions to E-Book programs like RAZ-Kids are a good investment for schools.

Moreover, if schools already have a decent library of print books, they can keep their library and give students more reading options by subscribing to an E-Book website. We know from Krashen and Bland (2014) that students benefit from access to a lot of different books.

Another huge advantage of E-Books is the possibility of students accessing E-Books over the summer. I do not know of any school libraries that allow students to keep books over the summer, but we know from Allington and McGill-Franzen (2008)

that when students have access to books over the summer, this leads to gains on high-stakes standardized tests.

### **Impact on My Teaching**

In the previous section, I described how my project might inform schools and E-Book websites. In this section, I will describe how it impacts my own teaching decisions.

**RAZ-Kids is still a good choice for my students.** I reviewed RAZ-Kids, Epic!, and Tumblebooks for my website keeping in mind factors that I knew from my research made E-Books better for emergent readers. My conclusion is that RAZ-Kids is the best choice for my students since I work with many emergent readers. However, I will be cognizant of the limitations of RAZ-Kids. My higher readers should still use the school library to access fiction in specific genres that interests them. Also, because RAZ-Kids' text-to-speech narrations do not model prosody very well, I need to regularly read books aloud.

**I will structuring reading time differently in my classroom.** Based on what I learned in my literature review and ideas I had while working on articles for the website, I think I can implement independent reading in my classroom with better results than before. First, I need to explicitly teach independent reading expectations and discuss stamina-building with students. I also need to remind them of these expectations regularly. Then I need to set goals for reading accomplishments with students individually. While students are reading, I should be checking in with individuals and seeing how they are progressing towards their goals while also supervising the room

generally. After reading, I will use one of the after-reading activities I posted on the website or a similar activity to encourage students to think about their reading and share with others. I will also start reading young adult books myself and doing regular book talks to the class.

### **How this Project Benefits the Profession**

In the previous section, I discussed how my project will impact my own teaching practice. In this section, I will describe the impact I hope it will have on others.

**What Makes a Good Book for English Learners?** At the outset of this capstone, I did not know what factors impacted how appropriate an E-Book is for English learners, but now I can say that I do. If teachers consult my website, they can make sure that the E-Books or E-Book websites they are using with their students meet the needs of emergent readers, provide comprehensible input, and are culturally relevant to their students.

### **Routines and Policies for E-Books in the Classroom**

While having students read independently seems like the easiest thing a teacher could do, I have found that the teacher actually plays a critical role in making it successful. Students need to be explicitly taught expectations for independent reading and taught strategies for boosting their reading stamina. They also need help from the teacher to set goals and to be closely monitored during reading. Finally, the teacher can use book talks and after-reading activities to create a classroom culture of reading for enjoyment. The role that the teacher plays in facilitating independent reading is not

something that I suspect most educators know much about, but they can learn about it from my website.

### **Limitations and Ongoing Work**

In the previous section, I discussed how my website benefits the profession. In this section, I will discuss the aspects of my project that could be improved. Since I now have an active Wordpress account, I am free to add content to the website at anytime and intend to stay informed on the subjects of E-Books and independent reading with ELLs. My contact information is on the website and visitors can also leave comments or take the satisfaction survey to give me feedback. So if I find that visitors are engaged with the website, I can keep improving it and adding more content.

### **More Sources and Newer Sources**

Because of the challenge I had finding sources, I had to draw on many sources that are more than five years old. Since then, E-Books have changed a lot and will likely continue to. In addition, new studies could change what we think we know about E-Books or confirm what are now merely conjectures to indeed be facts. Many of my studies attempted to compare E-Books to print books, but they did not compare E-Books to other E-Books with different features. This means that we can only speculate on some of the effects that certain text-tools have. For example, with more research, we could confirm that text-to-speech narration is detrimental to developing prosody. Or a study could show that highlighting narrated words helps students develop sight-word fluency. Once again, I only found two sources that studied E-Books used with ELLs, so additional studies on how E-Reading affects ELLs would be a welcome contribution to the field.

I would highly suggest to Hamline students who are interested in literacy that they develop research projects focused on the effects of E-Book reading. I would be especially interested in studies that compare the effects of different E-Book websites. My reviews are based on my opinions and what I learned about best practices in supporting ELLs and emergent readers, but they are not based on hard data on the effectiveness of the three sites. I would be open to changing my perception that RAZ-Kids and Epic! are a little better than TumbleBooks if someone could provide data that contradicted this.

### **Making the Website More Engaging**

While I believe that it is useful to teachers now, my website can be made more engaging in several ways. This would make visitors more likely to deeply process what they encounter and more likely to spend more time on the website.

First, I need to help teachers find out about it so that I have more visitors and more comments and messages from visitors. I outlined my plan for accomplishing this in Chapter Three, but I still have work to do. Their ideas and experiences could add to the website.

Because I was developing the website over the summer, I did not include authentic examples of student work or video of how independent reading works in my classroom, but I think adding these kind of multimedia resources in the fall will help the website be more interesting for visitors.

### **Conclusion**

The essential question of this capstone has been, *How can elementary teachers best use independent reading with E-Books with ELL students?* After researching this

question, I developed a website that would help teachers choose the best E-Books for their students and help them implement independent E-Reading time in their classroom.

In this chapter, I reflected on the website as a product and the process of making it. I shared my overall learnings and discussed how I used research to develop my project. I also considered how my website could inform policy for E-Book designers and for teachers and administrators, how it will impact my own teaching, and how I hope it can help others. In the last section, I described how I hope to make the website better and keep developing it over time.

This project has already made me a better teacher for my ELL students, and I hope that the website will help others with their students in need as well.

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